## Application Serial No. 10/059,225

## **IN THE CLAIMS:**

Please amend the claims as follows:

- 1. (Cancelled)
- 2. (Previously presented) A method of wiring a semiconductor integrated circuit to include a scan chain between first and second memory elements previously selected in the semiconductor integrated circuit, said method comprising:

an element connecting step of connecting one of plural output terminals of a first memory element with a scan data input terminal of a second memory element having a scan test function, wherein said element connecting step includes steps of:

calculating a beeline distance on a substrate from each of said output terminals of said first memory element to said scan data input terminal of said second memory element; and connecting one of said output terminals of said first memory element having a minimum beeline distance to said scan data input terminal of said second memory element with said scan data input terminal of said second memory element.

- 3-4. (Cancelled)
- 5. (Previously presented) A method of wiring a semiconductor integrated circuit to include a scan chain between first and second memory elements previously selected in the semiconductor integrated circuit, said method comprising:

an element connecting step of connecting one of plural output terminals of a first memory element with a scan data input terminal of a second memory element having a scan test function, wherein said element connecting step includes steps of:

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calculating wire lengths to be laid from said output terminals of said first memory element to said scan data input terminal of said second memory element; and

connecting one of said output terminals of said first memory element having a minimum wire length with said scan data input terminal of said second memory element.

- 6-7. (Cancelled)
- 8. (Previously presented) A method of wiring a semiconductor integrated circuit to include a scan chain between first and second memory elements previously selected in the semiconductor integrated circuit, said method comprising:

an element connecting step of connecting one of plural output terminals of a first memory element with a scan data input terminal of a second memory element having a scan test function, wherein said element connecting step includes steps of:

connecting one of aid output terminals having minimum fan-out with said scan data input terminal of said second memory element.

calculating fan-out of said output terminals of said first memory element; and

- 9-11. (Cancelled)
- 12. (Previously presented) A method of wiring a semiconductor integrated circuit to include a scan chain between first and second memory elements previously selected in the semiconductor integrated circuit, said method comprising:

an element connecting step of connecting one of plural output terminals of a first memory element with a scan data input terminal of a second memory element having a scan test function, wherein said element connecting step includes steps of:

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calculating load capacitances of said output terminals of said first memory element; and connecting one of said output terminals of said first memory element having a minimum load capacitance with said scan data input terminal of said second memory element.

13-20. (Cancelled)